Serial No.: U.S. Nat'l. Stage of PCT/JP2004/008955   Attorney's Docket No.: SUZ0025-US
Art Unit: Unknown   Page 2
Inventor: Yoshiaki SATO et al.

Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in this application.

Listing of Claims:

1. (Original)   A pressure muscle strength increasing apparatus comprising:

a tight fitting device including a belt having the length that is enough to be wrapped around a predetermined range of muscles of one of the limbs; fastening means for fastening said belt with said belt being wrapped around said predetermined range of muscles; and a gas bag provided in or on said belt, said gas bag being adapted to apply a predetermined compression force to said predetermined range of muscles by means of compressing said predetermined range of muscles when said gas bag is filled with gas while said belt that has been wrapped around said predetermined range of muscles is fastened by said fastening means;

pressure setting means that is capable of forcing a gas into said gas bag and removing the gas from said gas bag;

control means for controlling said pressure setting means in order to change said compression force; and

quantification means for quantifying, at a position closer to the distal end of a limb than said predetermined range of muscles, a quantification target that is associated with the state of blood flow that varies depending on said compression force;

said control means being adapted to control said pressure setting means based on said quantification target.

Serial No.: U.S.Nat'l. Stage of PCT/JP2004/008955   Attorney's Docket No.: SUZ0025-US
Art Unit: Unknown   Page 3
Inventor: Yoshiaki SATO et al.

2. (Original)   The pressure muscle strength increasing apparatus as claimed in Claim 1, wherein

said quantification means is adapted to quantify said quantification target at a given time instant,

and

said control means is adapted to control said pressure setting means over time based on

the quantification target at that time instant.

3. (Original)   The pressure muscle strength increasing apparatus as claimed in Claim 2,

comprising recording means on which ideal data that is the data relating to an ideal

quantification target is recorded;

said control means being adapted to compare the quantification target at a given time

instant with an ideal quantification target that is represented by the ideal data read out of said

recording means, and to control said pressure setting means so that the control is performed to

make the quantification target at that time instant be closer to said ideal quantification target.

4. (Currently Amended) The pressure muscle strength increasing apparatus as claimed in ~~any one~~

~~of Claims 1 through 3~~ Claim 1, wherein said pressure muscle strength increasing apparatus

comprising of a plurality of tight fitting devices,

said quantification means are equal in number to said tight fitting devices, each being

associated with each of said tight fitting devices to quantify said quantification target on the limb

which its corresponding tight fitting device is wrapped around on the distal side thereof,

Serial No.: U.S.Nat'l. Stage of PCT/JP2004/008955   Attorney's Docket No.: SUZ0025-US
Art Unit: Unknown   Page 4
Inventor: Yoshiaki SATO et al.

said pressure setting means are equal in number to said tight fitting devices, each being

associated with each of said tight fitting devices,

said control means being adapted to individually control said pressure setting means

associated with the tight fitting devices that are associated with said quantification means on

which the quantification targets are determined, based on each of said quantification targets.

5. (Currently Amended) The pressure muscle strength increasing apparatus as claimed in ~~any one~~

~~of Claims 1 through 4~~ Claim 1, wherein said quantification target is at least one of Korotkoff

sounds, Swan sounds, and pulse waves.

6. (Original)   The pressure muscle strength increasing apparatus as claimed in Claim 2, wherein

said control means is adapted to control said pressure setting means to remove the gas from said

gas bag when said quantification target at that time instant falls into at least one of the following

1) to 3):

1) when the heart rate at that time instant is indicated to exceed a predetermined heart

rate;

2) when the blood pressure at that time instant is indicated to become lower than a

predetermined blood pressure; and

3) when pulsation at that time instant is indicated to be abnormal.

7. (Original)   A control device that is used in combination with:

Serial No.: U.S.Nat'l. Stage of PCT/JP2004/008955   Attorney's Docket No.: SUZ0025-US
                                                              Page 5
Art Unit: Unknown
Inventor: Yoshiaki SATO et al.

a tight fitting device including a belt having the length that is enough to be wrapped

around a predetermined range of muscles of one of the limbs, fastening means for fastening said

belt with said belt being wrapped around said predetermined range of muscles, a gas bag

provided in or on said belt, said gas bag being adapted to apply a predetermined compression

force to said predetermined range of muscles by means of compressing said predetermined range

of muscles when said gas bag is filled with gas while said belt that has been wrapped around said

predetermined range of muscles is fastened by said fastening means;

a pressure setting segment that is capable of forcing a gas into said gas bag and removing

the gas from said gas bag; and

a quantification segment for quantifying, at a position closer to the distal end of a limb

than said predetermined range of muscles, a quantification target that is associated with the state

of blood flow that varies depending on said compression force;

said control device comprising:

receiving means that receives quantification target data, which is the data about the

quantification target, from each of said quantification segments;

control data generating means for generating control data for use in controlling said

pressure setting segment to change said compression force based on the quantification target data

that have been received; and

sending means for sending said control data to said pressure setting segment.

8. (Original)   The control device as claimed in Claim 7, wherein

Serial No.: U.S.Nat'l. Stage of PCT/JP2004/008955   Attorney's Docket No.: SUZ0025-US
Art Unit: Unknown   Page 6
Inventor: Yoshiaki SATO et al.

said receiving means is adapted to receive said quantification target data over time,

said control data generating means is adapted to generate said control data over time, and

said sending means is adapted to send said control data to said pressure setting segment

over time,

when said quantification segment quantifies said quantification target at a given time

instant.

9. (Original)   The control device as claimed in Claim 8, comprising recording means on which

ideal data that is the data relating to an ideal quantification target is recorded,

said control data generating means being adapted to compare the ideal data read out of

said recording means with said quantification target data to generate said control data to control

said pressure setting segment to make the quantification target data at that time instant be closer

to said ideal data.

10. (Currently Amended) The control device as claimed in ~~any one of Claims 7 through 9~~ Claim

7, wherein the control device is used in combination with a plurality of tight fitting devices,

when said quantification segments are equal in number to said tight fitting devices, each

being associated with each of said tight fitting devices to quantify said quantification target on

the limb which its corresponding tight fitting device is wrapped around on the distal side thereof,

and

Serial No.: U.S.Nat'l. Stage of PCT/JP2004/008955   Attorney's Docket No.: SUZ0025-US
Art Unit: Unknown   Page 7
Inventor: Yoshiaki SATO et al.

when said pressure setting segments are equal in number to said tight fitting devices, each

being associated with each of said tight fitting devices,

said receiving means being adapted to receive said quantification target data over time

from each of said quantification segments,

said control data generating means being adapted to individually control said pressure

setting segments associated with the tight fitting devices that are associated with said

.quantification segments on which the quantification targets are determined, based on each of said

quantification target data.

11. (Currently Amended) The control device as claimed in ~~any one of Claims 7 through 10~~

Claim 7, wherein said quantification target is at least one of Korotkoff sounds, Swan sounds, and

pulse waves. _

12. (Original) The control device as claimed in Claim 8, wherein said control data generating

means is adapted to generate control data for use in controlling said pressure setting segment to

remove the gas from said gas bag when said quantification target at that time instant falls into at

least one of the following 1) to 3):

1) when the heart rate at that time instant is indicated to exceed a predetermined heart

rate;

2) when the blood pressure at that time instant is indicated to become lower than a

predetermined blood pressure; and

Serial No.: U.S.Nat'l. Stage of PCT/JP2004/008955   Attorney's Docket No.: SUZ0025-US
Art Unit: Unknown   Page 8
Inventor: Yoshiaki SATO et al.

3) when pulsation at that time instant is indicated to be abnormal.

13. (Original) A method that is carried out in control device that is used in combination with:

a tight fitting device including a belt having the length that is enough to be wrapped around a predetermined range of muscles of one of the limbs, fastening means for fastening said belt with said belt being wrapped around said predetermined range of muscles, a gas bag provided in or on said belt, said gas bag being adapted to apply a predetermined compression force to said predetermined range of muscles by means of compressing said predetermined range of muscles when said gas bag is filled with gas while said belt that has been wrapped around said predetermined range of muscles is fastened by said fastening means;

a pressure setting segment that is capable of forcing a gas into said gas bag and removing the gas from said gas bag; and

a quantification segment for quantifying, at a position closer to the distal end of a limb than said predetermined range of muscles, a quantification target that is associated with the state of blood flow that varies depending on said compression force;

said method comprising:

a step for receiving quantification target data, which is the data about the quantification target, from each of said quantification segments;

a step for generating control data for use in controlling said pressure setting segment to change said compression force based on the quantification target data that have been received; and

Serial No.: U.S.Nat'l. Stage of PCT/JP2004/008955   Attorney's Docket No.: SUZ0025-US
Art Unit: Unknown   Page 9
Inventor: Yoshiaki SATO et al.

a step for sending said control data to said pressure setting segment.

14. (Original) A pressure muscle strength increasing apparatus comprising:

a tight fitting device which is intended to encircle a predetermined range of muscles of

one of the limbs, is intended to apply a predetermined compression force to said predetermined

range of muscles by means of compressing said predetermined range of muscles, and is designed

so that said compression force can be varied;

pressure setting means for use in controlling the compression force provided by said tight

fitting device;

control means for controlling said pressure setting means in order to change said

compression force; and

quantification means for quantifying, at a position closer to the distal end of a limb than

said predetermined range of muscles, a quantification target that is associated with the state of

blood flow that varies depending on said compression force;

said control means being adapted to control said pressure setting means based on said

quantification target.

15. (Original) A control device that is used in combination with:

a tight fitting device which is intended to encircle a predetermined range of muscles of

one of the limbs, is intended to apply a predetermined compression force to said predetermined

Serial No.: U.S.Nat'l. Stage of PCT/JP2004/008955   Attorney's Docket No.: SUZ0025-US
Art Unit: Unknown   Page 10
Inventor: Yoshiaki SATO et al.

range of muscles by means of compressing said predetermined range of muscles, and is designed

so that said compression force can be varied;

a pressure setting segment for use in controlling the compression force provided by said

tight fitting device; and

a quantification segment for quantifying, at a position closer to the distal end of a limb

than said predetermined range of muscles, a quantification target that is associated with the state

of blood flow that varies depending on said compression force;

said control segment comprising:

receiving means that receives quantification target data, which is the data about the

quantification target, from each of said quantification segments;

control data generating means for generating control data for use in controlling said

pressure setting segment to change said compression force based on the quantification target data

that have been received; and

sending means for sending said control data to said pressure setting segment.

16. (Original) A method that is carried out in a control device that is used in combination with:

a tight fitting device which is intended to encircle a predetermined range of muscles of

one of the limbs, is intended to apply a predetermined compression force to said predetermined

range of muscles by means of compressing said predetermined range of muscles, and is designed

so that said compression force can be varied;

Serial No.: U.S.Nat'l. Stage of PCT/JP2004/008955   Attorney's Docket No.: SUZ0025-US
Art Unit: Unknown   Page 11
Inventor: Yoshiaki SATO et al.

a pressure setting segment for use in controlling the compression force provided by said

tight fitting device; and

a quantification segment for quantifying, at a position closer to the distal end of a limb

than said predetermined range of muscles, a quantification target that is associated with the state

of blood flow that varies depending on said compression force;

said method comprising:

a step for receiving quantification target data, which is the data about the quantification

target, from each of said quantification segments;

a step for generating control data for use in controlling said pressure setting segment to

change said compression force based on the quantification target data that have been received;

and

a step for sending said control data to said pressure setting segment.